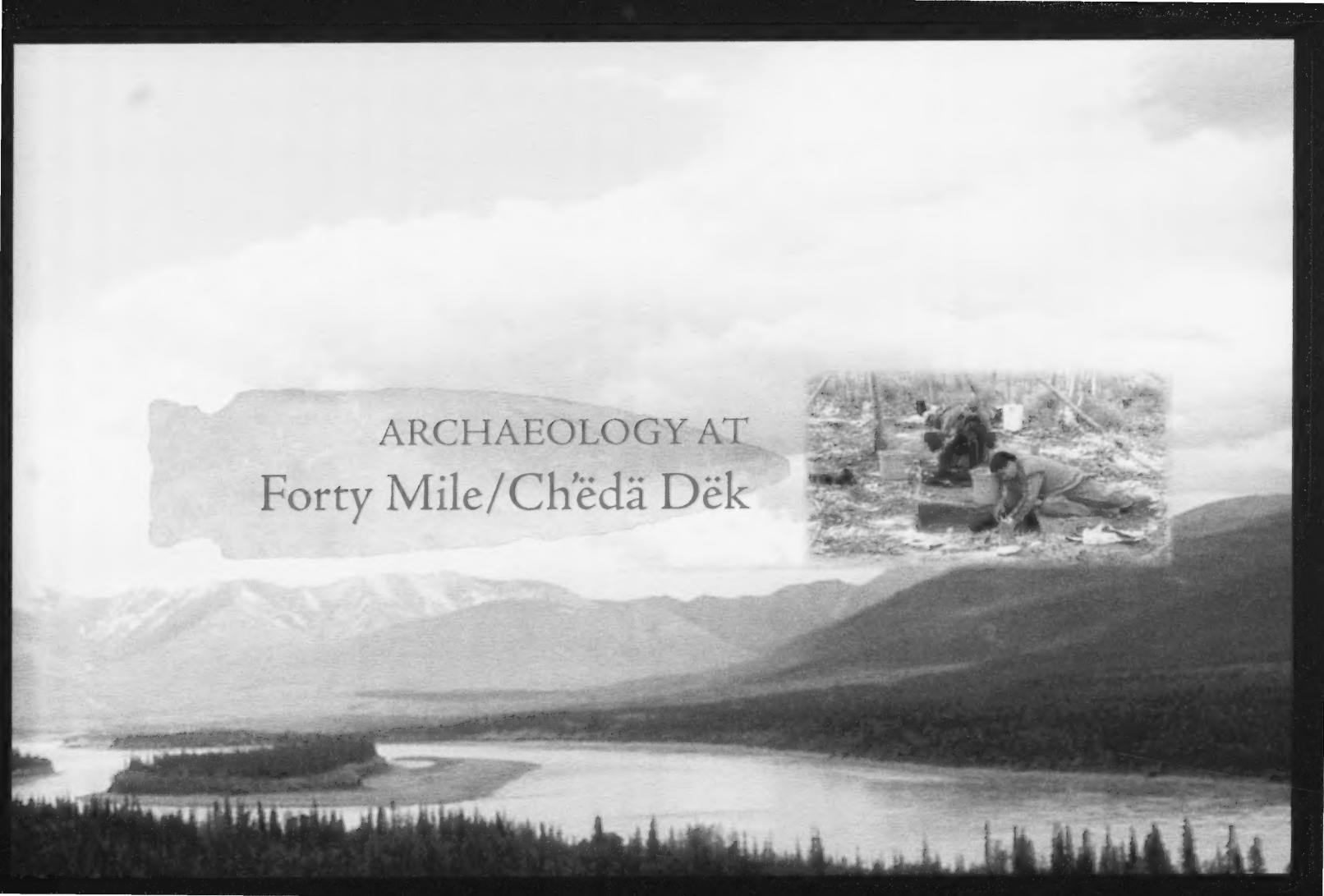
ARCHAEOLOGY AT
Forty Mile/Ch'ëdä Dëk

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Photo credits: Thomas J. Hammer and Christian D. Thomas, and as indicated.

Printed in Canada, 2006

ISBN 1-55362-276-6

Design: K-L Services (Whitehorse, Yukon)

FRONT COVER PHOTOS View down river from north end of Forty Mile Island. INSETS Spear point, over 2,000 years old. Adam Roberts, Alana Taylor, Troy Taylor and Isabelle Corriveau excavating at Forty Mile, North Locality.

BACK COVER PHOTOS Adam Roberts, Nolan Hammer, James Christiansen and Melissa Hammer, at Forty Mile, 2002. Derek Scheffen and Tanner Sidney, visiting Tr'ondëk Hwëch'in students, excavating at the Anglican Church. Kyle Isaac excavating a buried cache pit, 2001. Victor John and Tanner Sidney at the Anglican church test excavation in 2003, with James Christiansen in background.

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Forty Mile/Ch'ëdä Dëk

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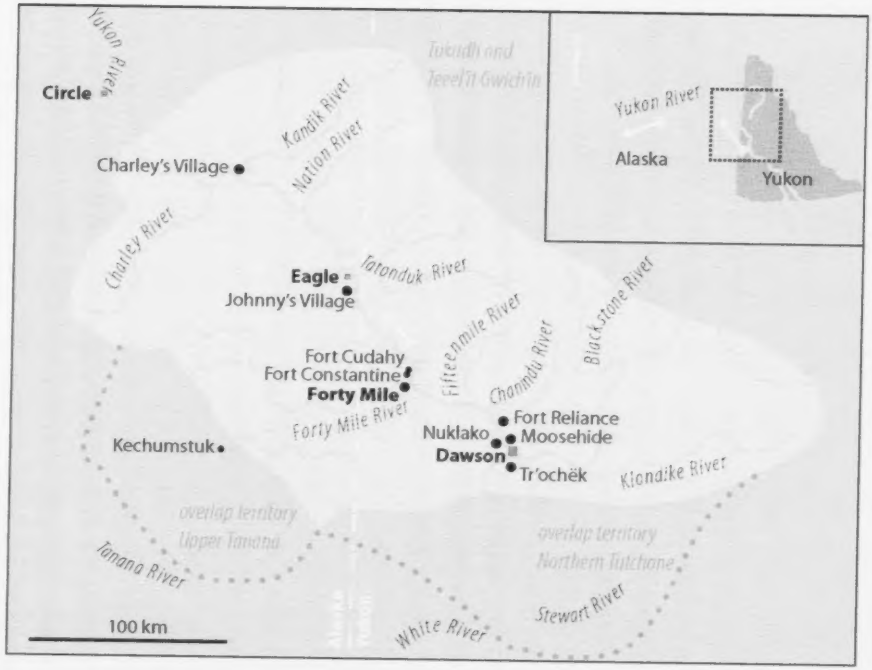


Introduction

Forty Mile is best known as one of the Yukon's oldest towns. It was established in 1886 on the Yukon River, near the Alaskan border, by prospectors and fortune hunters in search of gold. The appearance of a ramshackle collection of cabins and shacks at the mouth of the Fortymile River heralded the onset of a new era in Yukon history that culminated in the Klondike gold rush of 1898.

The confluence of the Fortymile and Yukon rivers, however, has a much longer history of settlement. In the late 18th and early 19th century, Forty Mile was within the territory of the Hän Hwëch'in leader, Chief Charley, whose country also included Charley's Village, Eagle, Kechumstuk and much of the upper Fortymile River country. The early missionaries and prospectors referred to this subgroup of the Hän people as the "Fortymile Indians" or "Charlie's Band."

The mouth of the Fortymile River was also the territory of another Hän group under Chief David, who had his basecamp at David's Camp (Johnny's Village) near Eagle. Upriver was the country of the Tr'ondëk Hwëch'in under Chief Isaac, whose headquarters was at Tr'ochëk, at the mouth of the Klondike River (Mishler and Simeone 2004). According to Percy Henry, the Hän name for the location of Forty Mile is called Ch'ëdä Dëk in the Hän language, for which the original meaning has been lost over time (Dobrowolsky 2003).

For the Hän, the confluence of the Fortymile and Yukon rivers was important not for gold but for caribou. This location is one of the major fall river crossing points of the Fortymile caribou herd (Farnell, personal communication November 1, 2005). Past occupants of the site would have been strategically situated to intercept the herd as it crossed the Yukon River en route to winter ranges in the upper Fortymile River area. In springtime, the grayling fishery in Fortymile River would have brought people to the area as well. In historic times, salmon were gaffed in summer from a small island in the Yukon River opposite Forty Mile.

LEFT TO RIGHT Steve Kocsis, Katrina Kocsis, Pait Johnson and Tanner Sidney screen excavated backdirt at Forty Mile, near Anglican Church.

This booklet contains an account of one aspect of Forty Mile history that began long before the gold rush. The history described here is reconstructed principally from the evidence of archaeological excavations begun in 1998. These excavations uncovered not only the artifacts and decayed structures of an early gold rush town, but also revealed more than 2,000 years of First Nations history buried in layers of river silt.

These studies were a joint project of the Tr'ondëk Hwëch'in and the Government of Yukon to assist in the management, planning and interpretation of the Forty Mile Historic Site. Together with Fort Constantine and Fort Cudahy, located on the opposite side of the Fortymile River mouth, Forty Mile is a jointly owned and managed historic site in the Tr'ondëk Hwëch'in Final Agreement.

Forty Mile herd crossing the Yukon River, ca. 1900. YA Claude B. Tidd Coll. #7038.

Historic FORTY MILE

The historic Forty Mile townsite had its beginnings in the winter of 1886-1887, when a score of miners working in the area at the time gold was discovered overwintered at the mouth of the Fortymile River (Gates 1994). By the time William Ogilvie arrived as part of the Canadian Yukon Expedition on the 7th of September 1887 to determine the location of the Alaska-Yukon border (141st meridian), commercial interests were already established at Forty Mile. A log, two-story, 30-foot by 60-foot Alaska Commercial Company (ACCo) building was under construction by ACCo agents Leroy McQuesten and Arthur Harper on the flood terrace at the confluence of the Yukon and Fortymile rivers (Ogilvie 1913).

In short order, institutions began to appear on the scene. The first was the Anglican Church, which established a Church Missionary Society mission called St. John's, or Buxton, Mission on the island (Mission Island) south of the main town site area

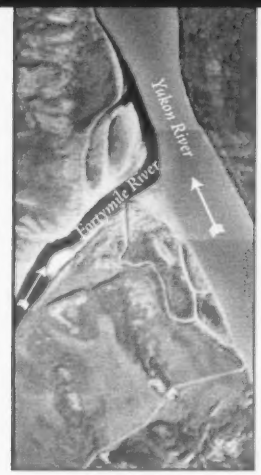
William Ogilvie's map of Forty Mile in 1891, at the confluence of the Fortymile and Yukon rivers. Forty Mile River flow is shown by the arrow on the left. The Yukon River flows right to left across the top.

Cabin remains reported as the Alaska Commercial Company employee residence. This may be the oldest standing building at Forty Mile, dating to 1886-1887.

James Christiansen marks a historic artefact.

(Gates 1994). Possibly this was also the site used traditionally by the Hän for gaffing salmon. In 1889, a post office was established with the address of "Mitchell, Alaska," and Jack McQuesten as postmaster. By this time, there were 10 saloons serving the needs of the populace of Forty Mile and its environs. On Ogilvie's return to the region in 1888-1889 for further boundary work, he remarked that Forty Mile was "the worst Jumble I ever saw." (cf. Barrett 1986; Wright 1976).

By 1894, Forty Mile boasted two well-equipped stores (ACCo and the North American Transportation & Trading Company), a lending library, billiard room, the 10 saloons, two restaurants, a theatre, an opera house with San Francisco girls, two doctors, two blacksmiths, a hardware/tinsmith shop, a barber, a baker, a watchmaker and a dressmaker, as well as numerous distilleries (Barrett 1986; Gates 1994; Sola 1897). The business centre was surrounded by 80 to 90 log cabins, and the townsite, at its peak, serviced a population of about 600 (De Windt 1898: 139; Gates 1994: 76).



Fort Cudahy
1 NAT&T Co.
2 Warehouse
3 Warehouse
4 Sawmill
5 Unknown
6 Saloon
7 Inspector Constantine's quarters
8 Inspector Strickland's quarters
9 Officer's Mess
10 Captain Healy's residence
11 Dr. Wills's quarters
12 NAT&T Co. employees

Fort Constantine
1 Barracks
2 Staff Sgt. quarters
3 Officer's quarters
4 Officer's quarters
5 Doctor's quarters
6 Hospital
7 Quartermaster store
8 Guard house

Forty Mile
1 Pioneer Restaurant
2 AC Co.
3 Barber shop

Forty Mile Island
1 Telegraph office
2 RNWMP post
3 St. James Anglican church

Map of Forty Mile, 1891 (from Gates 1994).

West side of Alaska Commercial Company warehouse at Forty Mile.

Leon Sidney excavating a test pit in the 1998 survey of Forty Mile.

Excavation of southwest corner of a building outline on Forty Mile Island.

Although surveyed in the late 1890s, construction in the townsite did not follow the surveyed lot plan. De Windt (1898: 139) described the town as "a collection of eighty or ninety dismal-looking log huts on a mudbank…with no attempt at regularity, the marshy intervening spaces being littered with wood shavings, empty tins, and other rubbish…." The log huts were one-room affairs, usually without windows, and with sod roofs, at times supporting a garden. The walls were chinked with moss, and heating came from a Yukon stove (Berton 1958; Gates 1994).

Only a handful of buildings remain today at Forty Mile as a testament to its eventful, though short-lived, history as an early gold rush town. One of the objectives of the archaeological investigations carried out over the past seven years has been to locate and identify the remains of the structures and artifacts of this era to help preserve some of the rapidly vanishing pieces of Forty Mile history.

St. James church, 2000. Pieces of the interpretive sign demonstrate the effects of ice rafting. Periodic ice rafting has likely destroyed and damaged a number of historic structures at Forty Mile.

James Christiansen assisting in mapping historic features in the Forty Mile townsite.

THE BUXTON MISSION

St. John's, or Buxton, Mission was established on an island south of Forty Mile Island by J.W. Ellington in 1887. In 1892, the Reverend William Bompas arrived to take charge of the Mission. During his tenure, the mission buildings consisted of a two-story residence with a summer kitchen, a shed for storage and a schoolhouse. The school (the first in the Yukon) operated until 1901, when Bompas moved to Caribou Crossing (Carcross) and opened a school there.

There were also up to eight First Nations dwellings associated with the Mission. As a reflection of their entrepreneurial spirit and willingness to participate in the economy and society of Forty Mile, the Hän at Forty Mile began construction of a dance hall on Mission Island in order to attract money to their village. However, as the "walls were going up, Bishop Bompas interceded. Bompas later used the wood to construct a new church" (Coates 1991: 80).

In 1901, Rev. R.J. Bowen built St. James Anglican church, a small log cabin with a bell tower on Forty Mile Island, across from Mission Island (Barrett 1986; Coates 1991). St. James church was closed in the 1930s. As will be seen later, this church plays a part in the discovery of the earliest history of Forty Mile.

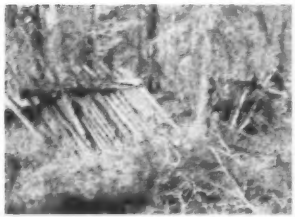
A preliminary archaeological survey on Mission Island mapped the building outline and cellar associated with the main residence, as well as the outline of the schoolhouse and six smaller rectangular depressions that are likely the remains of dwellings occupied by the Hän in the Forty Mile historic period.

FORT CUDAHY

In direct competition with the Alaska Commercial Company at Forty Mile, Captain J.J. Healy, representing the North American Transportation and Trading Company (NAT&T Co), established Fort Cudahy in 1893 on the Yukon River, about a kilometre downstream from the Fortymile River confluence.

Upon completion, Fort Cudahy comprised large storehouses, living quarters, trading shops, a free reading room, a billiard hall and a sawmill (Ogilvie 1913; Gates 1994). The buildings of Fort Cudahy all fronted the Yukon River in linear fashion, abutting on the north-south running boardwalk that connected the commercial centre to Fort Constantine. The enterprise was a short-lived one, and by

Chris Thomas records metal container midden at Fort Cudahy.



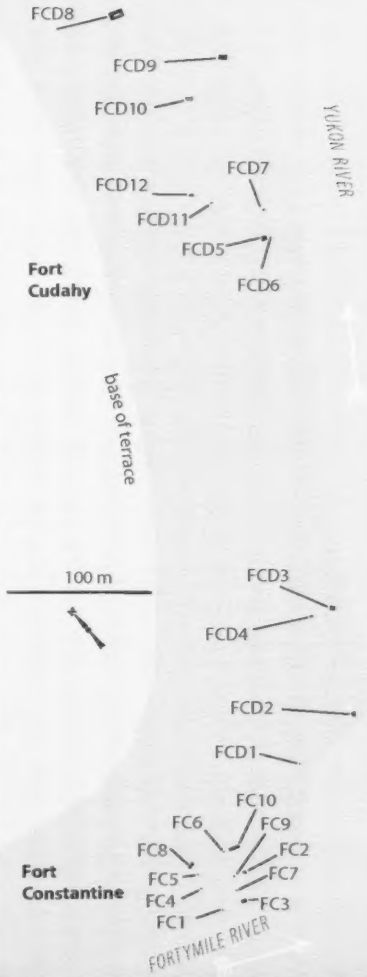
Remains of a pole fence around a fox pen at Fort Cudahy.

Remains of a wooden barrel.

Tr'ondëk Hwëch'in heritage officer Jody Beaumont assists in archaeological testing at Fort Cudahy, 2005.

1900, the Alaska Commercial Company once again was left in sole proprietorship of Forty Mile area commerce.

Fort Cudahy is preserved in the archaeological record as several bermed building outlines and building depressions. Very little was left behind in the planned abandonment of this trading post. Testing in 2005 recovered exceedingly few artifacts, suggesting that the little that remained was soon recycled for the needs of the thrifty residents of Forty Mile. The remains of an abandoned fox farm at Fort Cudahy are evidence of a brief reoccupation in the early decades of the 20th century.



Fort Constantine and Fort Cudahy archaeological features map (Hammer 2000).

Fort Cudahy (FCD) features

FCD-1 Tongue and groove planking.
FCD-2 Possible rectangular building depression.
FCD-3 Possible cellar depression.
FCD-4 Rectangular depression.
FCD-5 Cellar depression.
FCD-6 Small metal container midden containing kerosene cans and seven hole-in-top milk cans including an "Eagle" brand evaporated milk can.
FCD-7 Rectangular depression – possible privy.
FCD-8 Bermed building outline with cellar depression.
FCD-9 Bermed building outline.
FCD-10 Rectangular cellar (?) depression.
FCD-11 Yukon stove fragments.
FCD-12 Possible cellar depression.

Fort Constantine (FC) features

FC-1 Collapsed cement stucco monument. Not contemporaneous with Fort Constantine.
FC-2 Rectangular depression with tongue and groove flooring (?) associated. A hand-tooled champagne finish bottle fragment also present. Extensively disturbed.
FC-3 Large rectangular depression with milled and sawn lumber. Extensively disturbed.
FC-4 Barrel stove/boiler; "WPF & Co. San Francisco" manufacturer.
FC-5 Three milled lumber whip saw horses.
FC-6 Tin plated box.
FC-7 Metal barrel.
FC-8 Extensively disturbed rectangular depression – possible building depression.
FC-9 Wooden barrel remains.
FC-10 Disturbed rectangular depression – possible building depression.

Manufacturer's mark, "WPF & Co. San Francisco," on boiler.

Barrel boiler.

FORT CONSTANTINE

The Northwest Mounted Police established Fort Constantine in 1895 at the mouth of Fortymile River, opposite the town of Forty Mile. The boggy location was poorly suited to construction, but the placement was a strategic one. From this location, Fort Constantine was in clear view of all those travelling up or down the Yukon and Fortymile rivers.

Fort Constantine was made up of a stockade, fronted by a spruce palisade façade and with bastions along the southeast and northwest corners (Plan of Fort Cudahy, no date). Within the stockade, eight hewn log buildings were constructed against the inner walls of the stockade, forming a parade ground. The structures included a staff sergeant's quarters; two officers' quarters; a doctor's quarters; a hospital; a building incorporating an orderly room, a quartermaster's store, a carpenter shop and a washroom; another building containing the guard house and prison; and a last building containing the barracks room, mess hall and kitchen.

In an attempt to deal with the problem of swampy ground, drainage ditches were excavated on the outside of the south and north walls of the stockade, and one even went through the middle of the compound and parade ground (Innes-Taylor, no date)

Remains of original Fort Constantine palisade.

Planks and a bottle fragment.

Although a detachment was to remain on a seasonal basis at Forty Mile into the 1930s, Constantine and the NWMP headquarters quickly moved to Dawson in 1897 on the heels of the Klondike gold discovery. There, they established Fort Herchmer.

In 1901, Fort Constantine was abandoned. Provisions were made for the useful disposal of building materials and, in some instances, the relocation of entire buildings. The NWMP moved to a new building next to the St. James church on Forty Mile Island. Roman numerals on the back of this 1901 building suggest it was moved, possibly from Fort Constantine itself. In 1910, this building was abandoned and the smaller Royal North-West Mounted Police contingent began to rent three cabins at Forty Mile. In 1932, the even smaller force moved into a single building known as the Roadhouse. In 1938, the now one-person permanent detachment was ended (Barrett 1986).

As a result of the orderly abandonment of Fort Constantine, very few structural remains were found during the archaeological survey of the site.

Leon Sidney and T.J. Hammer recording a shovel test at Forty Mile, 1998 (Bruce Barrett photo).

The survey of Fort Constantine has thus far identified only two large building depressions, two smaller depressions (possibly buildings), a preserved section of palisade from the original fort, and a small number of miscellaneous artifacts. Additional building remains may be present but could not be identified due to the highly disturbed condition of the site as a result of very active frost heaving. Disturbance and exposure of the permafrost layer during the construction of Fort Constantine triggered extensive ground thawing. The site is now characterized by large sinkholes and generally boggy ground.

Northwest Mounted Police Detachment. LEFT *South side.* RIGHT *North side.*

FORTY MILE IN LATER YEARS

The decline of Forty Mile began when gold was discovered on Birch Creek in 1893, initiating the rush to Circle City in Alaska. By the summer of 1896, Circle City "had eclipsed Forty Mile as the major mining centre in the Yukon basin and claimed the title of largest log city in the world" (Gates 1994: 114).

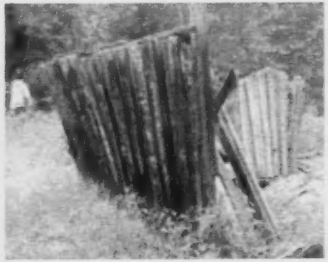
The decisive event in Forty Mile's decline was the Klondike gold rush. After about 1900, only a small population remained at Forty Mile to service the prospectors in the Fortymile and Sixtymile river areas. Forty Mile also operated as a stop for fuel wood for the sternwheelers as they headed down and up the Yukon River (Barrett 1986).

The Hän continued their seasonal occupation of the site to at least 1915. In that year, the Indian agent reported a total of 40 people at a village located on Mission Island (Hawksley 1915). By 1921, only 23 people were resident at Forty Mile, and in 1958, Forty Mile's last resident, Bill Couture, passed away (Barrett 1986; Settlement Surveys 1980).

General store

Graves in the Forty Mile cemetery.

LEFT Forty Mile farmhouse and RIGHT outbuildings.

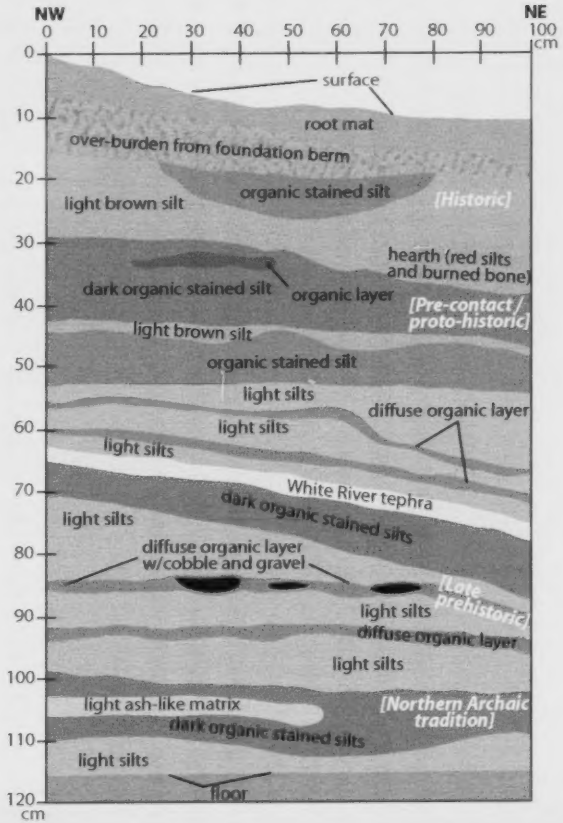


FORTY MILE in the archaeological past

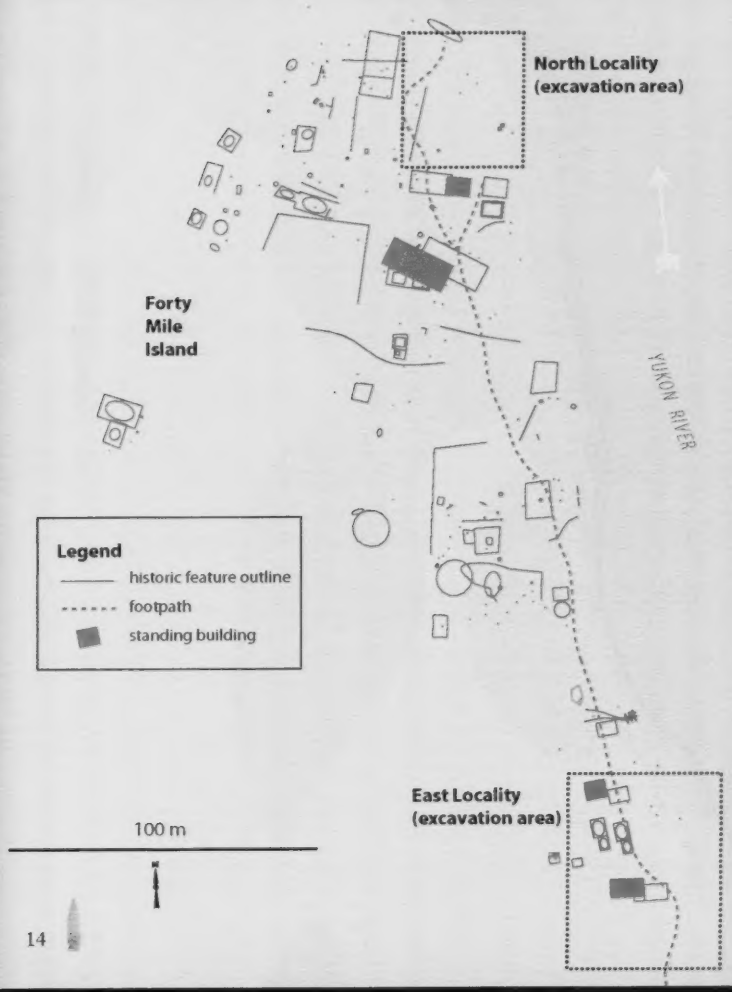
The natural flood cycle of the Yukon River has played a significant role in the formation and excellent preservation of the archaeological deposits at Forty Mile. Ice jams on the Yukon and Fortymile rivers periodically result in major flood episodes which deposit layers of river silt throughout the site. The buried soils of the Forty Mile site contain the record of these floods in the form of layers of river silts alternating with organic soil lenses, which were previously ground surfaces. Contained in these organic lenses, from time to time can be found the debris left behind by past residents of Forty Mile. The alternating layers of silt and organic lenses are more than a metre deep over much of the site area and preserve evidence of natural and cultural events over a period of more than 2,000 years.

In 1998, Tr'ondëk Hwëch'in and the Government of Yukon began a multi-year archaeological investigation to explore the history and archaeology of the Forty Mile site. In 1998 and 1999, archaeological testing was carried out to identify the buried archaeological evidence of past occupations at Forty Mile. In the course of the testing

Wooden post exposed in the excavations at the North Locality.



Example of soil layers in the excavation (Thomas 2004).



Forty Mile historic features map showing detail of Forty Mile Island (Hammer 2000, from map drafted by Brent Riley).

2001 excavations of the prehistoric component at the north end of Forty Mile Island (North Locality).

Wooden planks, bone and barrel remains in a historic feature found during excavations at the North Locality.

and subsequent excavations in 2000-2005, indications of very ancient use of the site were discovered, dating to prehistoric times. (Here in the Yukon, prehistoric sites are sites that are older than 150 to 200 years, before the time of written history in the territory.) Evidence of prehistoric occupation has been found throughout the site. To date, investigations have focussed on two localities: at the north end of Forty Mile Island (North Locality), and on the slightly elevated, former river terraces in the area of the St. James church building, on the east side of Forty Mile Island (East Locality).

The 2000 test excavations at the North Locality. Casey McGuire (right), Alana Taylor (left) and Victor John (background).

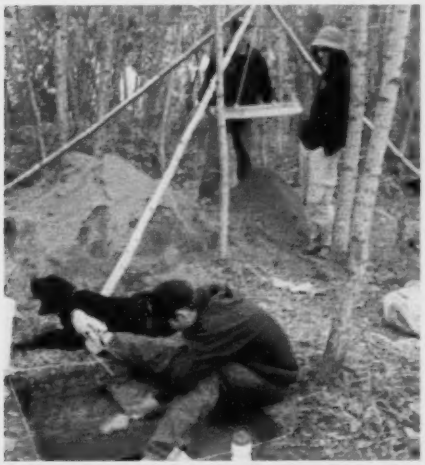
FORTY MILE TIMELINE

Years ago	Historic occupation period	Archaeological/cultural tradition	Event
today			today
120	HISTORIC	arrival of Euro-Americans	Forty Mile established, fur trade era (1886)
200	PROTO-HISTORIC	Hän culture	About 200 years ago (beginning of fur trade era and indirect trade with Europeans. Pre-contact era.)
1,200	PREHISTORIC	Late Prehistoric tradition	
2,300		Northern Archaic tradition	White River ash (East Lobe 1,150 years ago; North Lobe 1,900 years ago)

FORTY MILE ISLAND – NORTH LOCALITY

Archaeological excavations at the tip of Forty Mile Island uncovered evidence of three principal occupation periods. Historic occupations occur in the soil levels near the ground surface. Underlying this is a First Nations proto-historic occupation, representing the time of indirect contact with Europeans through traditional trade networks. The lowermost levels, approximately 60 to 70 centimetres below the ground surface, are the remains of prehistoric occupations.

2001 excavation at North Locality. R.J. Nagano excavating while Victor John and Chris Thomas look on.



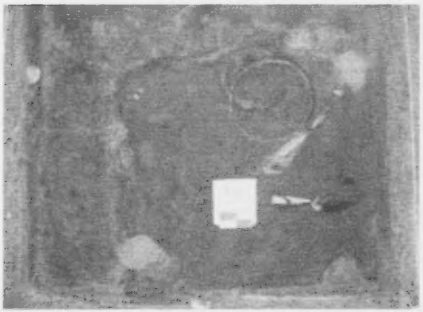
2000 excavation test trench in North Locality. Chris Thomas drawing wall profiles.

Start of excavations at the North Locality, Forty Mile Island.

Historic and proto-historic occupations

Excavations in the upper levels at the North Locality found four cache pits relating to the historic and proto-historic period occupations. Construction of food storage caches was routine when surplus meat or fish had to be preserved for the lean winter months. The presence of permafrost in the ground at Forty Mile would have been advantageous for meat and fish preservation in these cache pits. The Forty Mile caches were found to contain numerous artifacts of both First Nations and European origin, suggesting a complex record of past use, likely involving initial use as storage pits, then use as refuse middens and then, it appears, use as caches for tools and materials.

Implements recovered from the major cache at Forty Mile dated to the 1850s to 1890s (period of direct Hudson's Bay Company and American trade in the Yukon) include a cached steel axe and pick head; bottle glass reworked into traditional scrapers; bone tools (likely awls); and ammunition, including cartridge casings and shot. Also found were a tobacco plug pin, ceramics, utensils, trade beads, a bow saw, nails of which the vast majority were machine cut, metal container lids, and various other miscellaneous items. Mixed with this material were fish remains and large mammal bone fragments, including caribou mandibles and what appear to be moose long bone elements.



Historic cache feature uncovered in North Locality test excavations.

Excavation of historic bone and metal container in North Locality test excavations.

Leon Sidney shovel testing in the North Locality, 1998.

Beads are common in the collections from the early historic and proto-historic levels. The majority are blue, white, and Cornaline d'Aleppo beads, referred to as "white hearts" or "Hudson's Bay" beads.

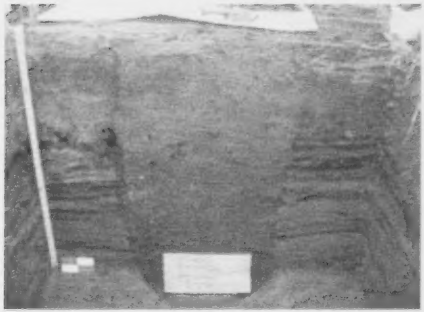
The blue beads have been identified as tube-drawn, however, tumbling is apparent and may be obscuring their actual method of manufacture. The Cornaline d'Aleppo beads are red-on-white glass tube-drawn or cane beads of Venetian origin, and are said to have first entered North America around 1825 (Allen, no date). The blue beads and the Cornaline d'Aleppo beads occur throughout the Yukon and Alaska and have been recovered in places such as Fort Selkirk, Tr'ochëk, Lapierre House and Fort Reliance (Clark 1995; Easton and Gotthardt 1989; Hammer 2000b, 2002a, 2002b).

Forty Mile's bead collection also includes a blue faceted "Russian trade bead" that is not Russian but rather a common trade bead of the Hudson's Bay Company. Seed beads of early historic vintage are present but not in significant quantities.

Sampling of artifacts recovered from early historic period occupations in the North Locality. The fragment of dark green bottle glass in the upper row has been chipped to form a scraping tool.

Beads are a hallmark of the proto-historic period and early historic fur trade era in the Yukon, and are one of the most eloquent indicators of events in this dynamic period in Hän history. The Hän had well-established links with the Upper Tanana to the west and the Northern Tutchone to the south. These connections provided the Hän with two avenues of access to the Southern Tutchone, and directly or indirectly, to the Tlingit on the coast (McClellan 1975: 509).

Through the Tlingit, items of Chinese, Russian and European manufacture reached the Hän long before the historic period. A dentalium shell, which would have been traded from the coast, was recovered from the large historic cache at Forty Mile. This artifact demonstrates that these relations and trading partnerships were maintained during the fur trade era. The Hän also kept very close ties with their Gwich'in neighbours to the west and north, and through them, the Hän were connected to Yupik, Inupiat and Inuit trade networks which ultimately extended to Siberia.



Wall profile showing a historic cache pit dug into the ground.

Early historic component of cache pit.

Victor John labelling sample bags at the North Locality, 2002.

Prehistoric occupations

Three hearths have been identified in the prehistoric occupation levels in the North Locality. Radiocarbon dating indicates that they represent at least two occupation periods, likely occurring between 300 and 500 years ago. The hearths were packed with burned and calcined bone fragments. Of the identifiable fragments, large and small mammal, bird and fish were present (Hammer 2002).

The quantity of bone, coupled with the large amount of fire-cracked rock, suggests that the fire pits were used primarily for cooking and making bone grease, rather than for drying meat. Larger bone fragments recovered from outside of the hearth appear to be caribou. A number of fish scales were also recovered but have yet to be identified as to species.

Excavations yielded tools and related debris, including four triangular-shaped chert end scrapers (likely the stone bits for wood- or antler-working tools), a double-bevelled bone point, a flaked-stone axe or wedge, birch bark and wood remains, and a small amount of stone chipping debris.

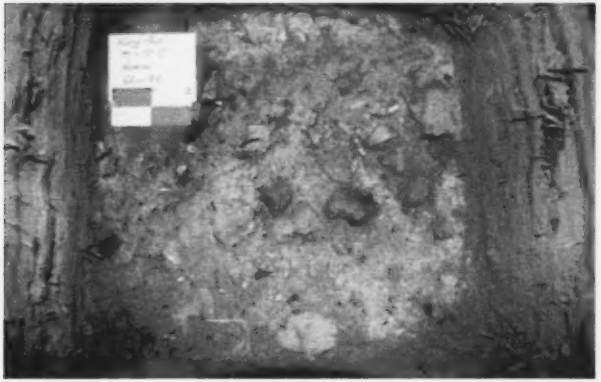
The archaeological evidence at the North Locality indicates significant prehistoric use of the site as a camp. Activities inferred

Excavations in the 2001 field season: LEFT *James Christiansen (left) and Leon Sidney.* RIGHT *Isabelle Corriveau (left) and Leon Sidney*

Remains of a birch bark basket uncovered in the North Locality.

from the cultural remains are food processing and preparation, wood working, and fashioning of birch bark containers. The stone chipping debris recovered in the excavation represents manufacture of simple tools from river cobbles, and tool resharpening and reworking.

Hunting and fishing activities are both represented at the Forty Mile site, which suggests historically documented caribou interception and grayling fishing have significant time depth here.



Late Prehistoric period hearth feature in the North Locality containing fire-cracked rock, and burned and calcined bone and ash.

Late Prehistoric period occupations in the Yukon date from the past 1,200 to 1,300 years. In the archaeological record of this period, the technology is characterized by an increase in production of tools and implements made of bone and antler, copper working using small native copper nuggets, and the adoption of the bow and arrow.

Sampling of artifacts from the North Locality excavations including (left to right): a bone or antler leister prong (?), tip of a bone or antler point, obsidian end scraper and various obsidian chips.

Bone and antler were used in the manufacture of barbed arrow points, awls, fleshers, scrapers and leister spears. Stone continued to be used for making whetstones, mauls, hammers, small stemmed and notched stone arrow points, adzes, axes, and various chipped scrapers and wedges (Clark and Morlan 1982; Workman 1978). On the domestic front, cooking techniques show an increased emphasis on stone boiling and the production of bone grease.

Excavation in progress of late prehistoric period component. Bone and a large flat stone are being exposed on the former living floor in the North Locality.

Victor John excavating in the main trench in the North Locality, 2002.

Chris Thomas excavating a hearth feature in the North Locality, 2001, and showing a newly discovered stone scraper.

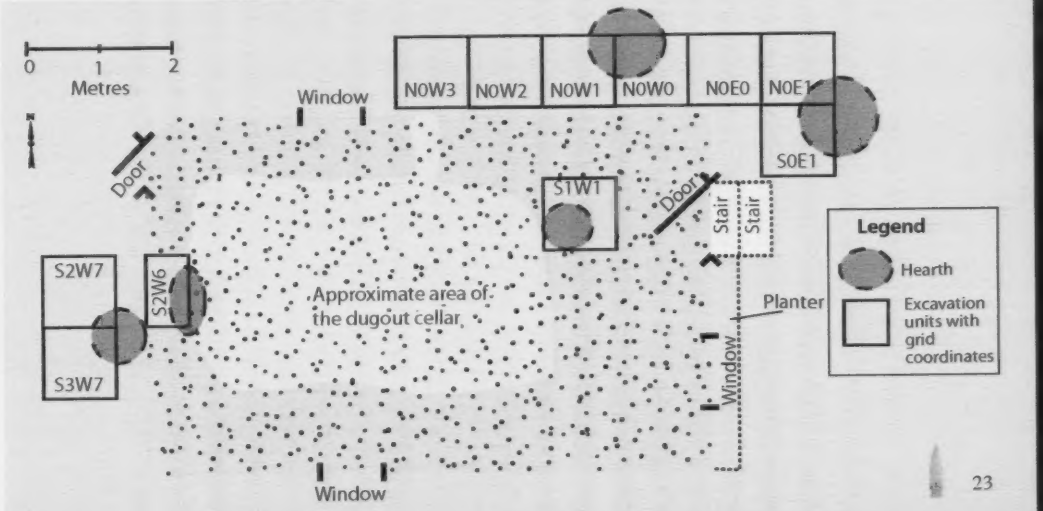
St. James Anglican church.

(left to right) Victor John, Tanner Sidney and James Christiansen excavating on the north wall of the Anglican church.

FORTY MILE ISLAND – EAST LOCALITY

Excavation in 2003 and 2004 at the East Locality of Forty Mile took place principally in the area of St. James Anglican church, with more limited excavation around the Royal North-West Mounted Police post and the telegraph office. The investigations uncovered four cultural levels in this locality. The uppermost horizon contains evidence of proto-historic and historic occupations; the three levels below represent increasingly older prehistoric occupations, the oldest dating back 2,300 years ago.

2003 excavation around the foundation of the Anglican church (Thomas 2003).

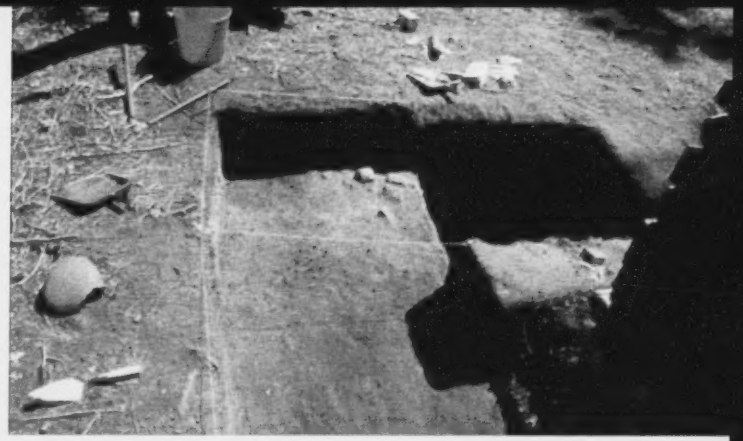


In the excavations, the occupation levels appear as dark lenses of organic-rich soil capped by light brown flood silts. Between 40 to 70 centimetres below the surface, a lens of 1,900-year-old white volcanic ash occurs, providing a useful time marker for the excavation.

Historic occupations

Excavation of the historic component recovered tube-drawn Hudson's Bay Company glass trade beads, as well as various early historic items including buttons, a cufflink, a medicine bottle, and various domestic and construction-related artifacts. Although not as extensive, the recovery of trade beads suggests this portion of the site, along with the North Locality, was regularly used as a habitation area during the proto-historic occupation period.

East wall of unit N0W1. Section of a hearth feature located above the White River ash (dating from 1,900 years before the present time).



Excavation in progress of Late Prehistoric period hearth feature in the East Locality, 2004.

Victor John excavating near the Anglican church.

In this excavation unit in the East Locality of Forty Mile Island, deposits measure more than a metre in depth. Episodes of flooding are represented by lenses of grey/brown silt and are interspersed by organic-rich horizons which indicate periods when the ground surface was vegetated. The thin, white lens about midway down in the stratigraphic profile is volcanic ash from the northern lobe of the White River eruption, dated to about 1,900 years ago.

Volcanic ash encountered in the excavations of the Forty Mile site, and elsewhere in the Dawson region, was deposited as a result of the initial eruption of Mount Churchill-Bona in southeastern Alaska approximately 1,900 years ago (Lerbekmo et al. 1975). A second eruption occurred about 1,150 years ago and is responsible for the distinctive ash horizons seen in southern and eastern Yukon. These ash deposits are referred to as the White River ash, and are differentiated as the northern lobe, which is visible in the soils of Forty Mile, and the eastern lobe, respectively.

Prehistoric level 1 - Above the White River ash

Testing and excavation at the St. James church building uncovered significant evidence of prehistoric occupation, dating to within the past 1,900 years. Five hearths containing burned bone fragments and fragmented and burned boiling stones were identified in the 2003 and 2004 testing and excavations, which indicated multiple occupations of this locality over more than 1,500 years. A preliminary examination of the bone from the hearths revealed the presence of both large and small mammals, including muskrat and hare. A small amount of fish bone was also present.

Stone artifacts from these occupations are representative of the range of activities typically carried out in a base camp situation,

Victoria Castillo (front), Charmaine Christiansen and Allison Kormendy at the 2004 excavations at St. James church.

Late Prehistoric period hearth feature with fire-cracked rock and burned and unburned bone.

including food preparation, tool manufacture and maintenance, and wood and hide working. Artifacts recovered consisted of three end scrapers; a scraper fragment; an unfinished tool, possibly destined to be a scraper; two cobble spall scrapers and a tabular scraper for hide working; a hammerstone; nine retouched or utilized flakes (including two possible spokeshaves, used to shape spear and arrow shafts); an adze fragment; and three cobble choppers. Also recovered were four flake cores made on river cobbles; a core fragment; and more than 100 flakes resulting from stone tool manufacture or resharpening.

In many respects, the occupation of the East Locality in the Late Prehistoric period may be seen as an extension of occupations at the North Locality of the site in the same period.

Prehistoric level II and III - Below the White River ash

Two occupation levels were identified in excavations below the White River ash. These levels span the period between about 1,900 and 2,200 years ago. A large, well-made side-notched stone spear point and various stone flakes and chips were recovered in the uppermost level. The underlying level was directly dated by associated charcoal to approximately 2,300 years ago. A large amount of stone chipping debris was recovered in this level together with the base of a side-notched spear point. Also recovered here was a bone awl or needle.

Side-notched stone spear points are hallmarks of archaeological cultures dating between about 1,200 and 5,000 years ago in the Yukon and Alaska, called the Northern Archaic tradition. The presence of the side-notched spear point here suggests occupations of Forty Mile in the past were related to caribou interception activities.

Victoria Castillo and Steve Ryan at the 2004 excavations at St. James church.

The absence of older occupation levels at the North Locality suggests that river levels had not as yet cut down to present levels and approximately 2,000 years ago, the North Locality was either under water or not attractive for occupation.

Stone spear point in situ.

Large side-notched spear point uncovered in excavations in the East Locality, dating to before 2,000 years ago.

Tr'ondëk Hwëch'in students (left to right) Steve Kocsis, Tanner Sidney and Pait Johnson visiting the 2002 excavations at Forty Mile.

Prehistory and history: An afterword

Archaeological studies have uncovered a history of occupation at Forty Mile dating back more than 2,000 years. The earliest occupations of the site represent the transition to a way of life focussed on the river, which was typical of the traditional Hän lifeway.

Large habitation sites, such as Tr'ochëk and Forty Mile, began to appear along major rivers in the Yukon within the past 2,000 years. Fishing is well represented in the subsistence records at these sites. Based on the technology known from the historic Hän culture, including fish weirs, traps and dip nets, it is likely that fishing activities were concentrated in the shallow tributary streams rather than in the deep, fast-flowing waters of the main rivers.

The shift to riverine camps may also reflect new strategies in the hunting of caribou. In northern Yukon, researchers have proposed that the large riverine camps of the Late Prehistoric period signal a shift to interception of large caribou herds at river crossing sites as part of a broader interception strategy that included the construction of the extensive surrounds or fences in upland settings (Irving and Cinq-Mars 1974; Le Blanc 1984).

The buried history of Forty Mile has given some of the first glimpses of a significant transition period in the prehistoric lifeways of the Hän that occurred more than 2,000 years ago. As well, the archaeological record provides a "snapshot in time" of the transition to the gold rush era at the end of the 19th century, affecting the way of life of Hän and newcomers alike. Future research at this important Yukon site will add detail to the picture of the past that has emerged from the archaeology of Forty Mile.

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Charmaine Christiansen and Allison Kormendy (and Sheena) at the 2004 excavations at St. James church.

The 1999 Forty Mile archaeology crew (left to right): Matthew Morgan, Chris Thomas, Shane Christiansen, T.J. Woods, R.J. Nagano, T.J. Hammer and Lonnie Farr (seated).

Acknowledgements

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2005 Chris Thomas, Jody Beaumont

Tr'ondëk Hwëch'in staff who assisted the project over the years include Georgette McLeod, Jody Beaumont, Tim Gerberding, Wayne Potoroko, Myste Anderson, Robert Rear and James MacDonald.

Thanks also to the Chief Isaac Development Corporation for assistance, to Sebastian Jones and Shelly, and to Yukon Heritage Resources staff Brent Riley, Ruth Gotthardt and Greg Hare.

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